

In the Claims

Claims 1-74 (canceled).

Claim 75 (new): A board-on-chip package, comprising:

a substrate having circuitry thereon and an opening therethrough;

a die adhered over the substrate and electrically connected to the circuitry with a plurality of electrical interconnects extending through the opening, the die having a planar upper surface; and

a flexible metallic material touching a portion of the planar upper surface of the die but not touching an entirety of the surface.

Claim 76 (new): The board-on-chip package of claim 75 wherein the die has a planar bottom surface facing the substrate and in opposing relation to the planar upper surface, and wherein the flexible metallic material is in physical contact with a portion of said planar bottom surface.

Claim 77 (new): The board-on-chip package of claim 75 further comprising a conductive adhesive adhering the flexible metallic material to the substrate.

Claim 78 (new): The board-on-chip package of claim 75 wherein the flexible metallic material comprises copper or aluminum.

Claim 79 (new): A board-on-chip package, comprising:

a substrate having circuitry thereon and an opening therethrough;
a die adhered over the substrate and electrically connected to the circuitry with a plurality of electrical interconnects extending through the opening, the die having a planar upper surface and an opposing planar bottom surface; and
a flexible metallic material touching a portion of the planar bottom surface and at least a portion of the planar upper surface.

Claim 80 (new): The board-on-chip package of claim 79 wherein the flexible metallic material touches an entirety of the planar upper surface.

Claim 81 (new): The board-on-chip package of claim 79 wherein the flexible metallic material comprises copper or aluminum.

Claim 82 (new): A board-on-chip package, comprising:

an substrate having circuitry thereon and an opening therethrough;

a die adhered to the substrate and electrically connected to the circuitry with a plurality of electrical interconnects extending through the opening, the die having a first surface facing the substrate, a second surface in opposing relation to the first surface, and a sidewall between the first and second surfaces; and

a flexible metallic material adhered to a portion of the die, the flexible metallic material being adhered to the substrate proximate the sidewall and extending across the sidewall to touch the second surface.

Claim 83 (new): The board-on-chip package of claim 82 wherein the sidewall has a length, and wherein the flexible metallic material touches a predominate portion of the sidewall length.

Claim 84 (new): The board-on-chip package of claim 82 wherein the sidewall has a length, and wherein the flexible metallic material is spaced from a predominate portion of the sidewall length by a gap.

Claim 85 (new): The board-on-chip package of claim 82 wherein the sidewall has a length, wherein the flexible metallic material is spaced from a predominate portion of the sidewall length by a gap, and wherein the gap is filled with electrically conductive epoxy extending from the sidewall to the flexible metallic material.

Claim 86 (new): A board-on-chip package, comprising:

a substrate having circuitry thereon and an opening therethrough;
a die adhered to the substrate and electrically connected to the circuitry with a plurality of electrical interconnects extending through the opening, the die having a first surface facing the substrate, a second surface in opposing relation to the first surface, and a sidewall surface extending between the first and second surfaces; and
a thermally conductive material touching at least two of the die first surface, second surface and sidewall surface.

Claim 87 (new): The board-on-chip package of claim 86 wherein the thermally conductive material comprises a silver-containing epoxy.

Claim 88 (new): The board-on-chip package of claim 86 wherein the thermally conductive material comprises a flexible metallic material.

Claim 89 (new): The board-on-chip package of claim 86 wherein the thermally conductive material comprises aluminum or copper.

Claim 90 (new): The board-on-chip package of claim 86 wherein the thermally conductive material touches the first surface.

Claim 91 (new): The board-on-chip package of claim 86 wherein the thermally conductive material touches the second surface.

Claim 92 (new): The board-on-chip package of claim 86 wherein the thermally conductive material touches the sidewall surface.

Claim 93 (new): The board-on-chip package of claim 86 wherein the thermally conductive material touches the sidewall surface and the second surface.

Claim 94 (new): The board-on-chip package of claim 86 wherein the thermally conductive material touches the sidewall surface and the first surface.

Claim 95 (new): The board-on-chip package of claim 86 wherein the thermally conductive material touches the sidewall surface, the first surface and the second surface.